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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

COLBERT, ELLA

ART UNIT PAPER NUMBER

3624

DATE MAILED: 06/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/294,656

Applicant(s)

M. CUSSON ET AL

Examiner

Ella Colbert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-35, 53-60, 84-93 and 112-131 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-35, 53-60, 84-93 and 112-131 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. Claims 24-35, 53-60, 84-93, and newly added claims 112-131 are presented for examination. Group II, claims 64-75 and 100-111 were not elected and will not be examined. Group I, claims 24-35, 53-60, and 84-93 have been elected without traverse for examination in response to the restriction requirement (Response to Restriction) on 03/22/02 has been entered as paper no. 19.

Drawings

2. The drawings are objected to because some of the reference numbers are illegible. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The Specification is objected to because of the following informalities: Page 4, line 30 recites "... For details, see pages 30-5 through 30-11 of the." Line 30 would be better recited as "... For details, see pages 5-30 of the." Page 16, line 17 recites "... in detail at pages 17-1 through 17-17 of the". Line 17 would be better recited as "... in detail at pages 1-17 of the".

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On page 13, lines 18, 22, and 32 recite “CDB description manager” and “CDB description”. On page 14, lines 12, 14, 28, 33, and on page 15, line 2 have a similar problem. What do Applicants’ mean by the acronym “CDB”?

On page 14, line 13 recites “ ... DSID”. What do Applicants’ mean by the acronym “DSID”?

On page 14, lines 22 & 24 recite “update revr”. What do Applicants’ mean by update revr”? These terms are not described in Applicants’ Specification so as to enable the Examiner to understand what Applicants’ mean.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Newly added claims 112-131 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification. The added material which is not supported by the original Specification is as follows: Claims 112- 131 recite objects, distributed database system, redirector, or specifier/specifiers which are not mentioned in Applicants’ Specification or drawings. Therefore, there is a lack of support in Applicants’ Specification for these claim limitations.

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Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 24-35, 53-60, and 84-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,924,096) Draper et al, hereafter Draper.

With respect to claims 24, 34, & 84, Draper teaches, a queryable cache that contains copies of certain of the datasets and is local to the server (col. 2, lines 47-55 and col. 4, lines 23-28); the improved server receiving a query for a remote dataset in a form required by the interface from the program (col. 1, lines 53-55, col. 4, lines 23-28 and lines 61-67, and col. 5, lines 1-2). Draper did not teach determining whether a copy of the dataset to be queried is present in the queryable cache and if the copy is present, querying the copy, and otherwise querying the remote dataset or whereby the queryable cache is transparent to the program, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to determine whether a copy of the dataset to be queried is present in the queryable cache and if the copy is present, querying the copy, and otherwise querying the remote dataset or whereby the queryable cache is transparent to the program and to modify in Draper in view of Draper's teachings of querying, copying, and cache because such a modification would allow

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Draper's system to have a process of extracting data from a database and presenting it for use and using a special memory subsystem which frequently uses data values that are duplicated for quick access.

With respect to claims 25, 35, and 85, Draper teaches, the program uses global identifiers for the remote data sets and the copies in the queryable cache have local identifiers (col. 1, lines 56-67, col. 2, lines 1-6, col. 5, lines 47-65 and col. 6, lines 8-48); and the improved server (col. 4, lines 31-35) further comprises: a query analyzer that receives the global identifier for a dataset being queried and if there is a copy of the data set indicated by the global identifier returns the local identifier to the server (col. 5, lines 38-56), the server using the local identifier to query the copy (col. 6, lines 61-67 and col. 7, lines 1-3).

With respect to claims 26, 53, and 93, Draper teaches, the query analyzer further indicates to the server whether the copy of the dataset is in the queryable cache (col. 7, lines 9-20).

With respect to claims 27, 54, and 86, Draper teaches, a dataset manager that determines a dataset for which a copy is needed in the cache obtains a copy of the remote dataset and adds the copy to the cache (col. 7, lines 59-67 and col. 8, lines 11-22).

With respect to claims 28, 55, and 87, Draper teaches, the dataset manager further determines a dataset for which a copy is no longer needed in the cache and removes the copy from the cache (col. 6, lines 37-48 and col. 7, lines 59-64).

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With respect claims 29, 56, and 88, Draper teaches, the dataset manager determines whether to add or remove a dataset by determining a likelihood that a query will be made to the dataset (col. 6, lines 15-21).

With respect to claims 30, 57, and 89, Draper teaches, a query log that lists past queries that have been made to the standard interface (col. 10, lines 22-53) and the dataset manager uses the query log to determine a likelihood that a query will be made to a dataset (col. 6, lines 15-21).

With respect to claims 31, 58, 59, 90, and 91, Draper teaches, the dataset manager uses information about an event that will result in queries to a dataset to determine a likelihood that a query will be made to a dataset (col. 7, lines 9-52).

With respect to claim 32, Draper teaches, the dataset manager uses information about a time of occurrence of the event to determine a likelihood that a query will be made to a dataset (col. 6, lines 61-67 and col. 7, lines 1-3).

With respect to claims 33, 60, and 92, Draper did not teach, when a change occurs in a remote dataset of the remote datasets, an indication including the change is sent to the server without intervention by the server and the improved server further comprises: and update receiver that receives the indication and modifies any copy of the changed dataset as required by the indication, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to when a change occurs in a remote dataset of the remote datasets, an indication including the change is sent to the server without intervention by the server and the improved server further comprises: and update receiver that receives the indication and modifies

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any copy of the changed dataset as required by the indication and to modify in Draper in view of his teachings of servers (col. 4, lines 23-28), copies (col. 8, lines 12-14), updating (col. 9, lines 30-31) and modifying (col. 8, lines 51-55) because such a modification would allow Draper's system to have an improved system for distributed database caching which reduces the amount of unnecessary data sent between the nodes.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. .

Maddalozzo, Jr. et al (US 5,878,218) discloses cache, copying, and a network.

Jadav, D. & Gupta, M. (IEEE) discloses a web server and caching data.

INQUIRIES

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ms. Ella Colbert whose telephone number is (703) 308-7064. The Examiner can normally be reached **Monday through Thursday from 6:30 a.m. to 3:00 p.m. EST.**

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Vincent Millin, can be reached on (703)308-1038.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

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Or faxed to:

(703)305-7687 for formal communications intended for entry

Or:

(703)746-7239 for informal or draft communications, please label

“PROPOSED” or “DRAFT”

Hand-delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, Virginia., Seventh Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (703)308-1113

Or (703)308-1114.



E. Colbert
May 30, 2002



VINCENT MILLIN
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